

NOTE: Test tank should be equipped so that exhaust fumes are channeled out of a building.

Start with all idle needles 7/8 turn open and adjust for maximum RPM with magneto retarded to give desired slow speed range. Turn low speed mixture adjusting needle counterclockwise until engine starts to "load up" or fire unevenly due to over-rich mixture. Then slowly turn the needle clockwise until cylinders fire evenly and engine picks up speed. Do not adjust leaner than necessary to attain reasonably smooth idling. When in

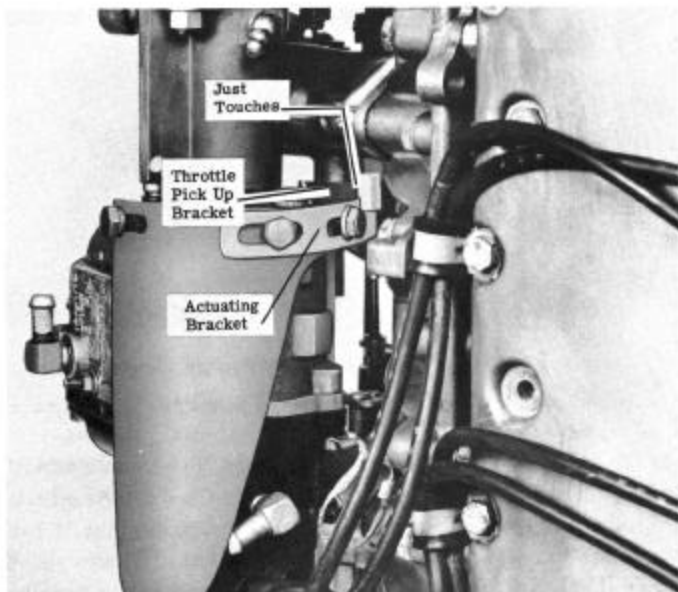


Figure 3. Pickup Adjustment

doubt, it is preferable to have the mixture set slightly rich rather than too lean.

TIMING - MAXIMUM SPARK ADVANCE

The flywheel has 2 markings: One is a line marked TDC (top dead center) and the other marked "40" (Figure 1) This is 40½° or .320" (8.128mm) BTDC (before top dead center). When the "40" marking is in line with the short line marked on the pulley flange, the piston is 40½° or .320" (8.128mm) BTDC.

Attach one test lead or Timing Meter (C-91-22966) or Magneto Analyzer (C-91-25213) to magneto frame and second lead of tester to primary ground terminal of magneto. With the cowl rear stop block loose, slowly advance magneto until points break, as indicated by tester used. Hold magneto at this position and adjust cowl rear stop block to contact magneto actuating bracket and tighten stop block screw.

When operating engine above recommended .320" (8.128 mm) BTDC, further advance adjustment should be made on a boat with a tachometer while running engine at full throttle. Advance spark until highest RPM is obtained and maintained from 3-to-5 minutes. Advance can then be measured for future settings.

IMPORTANT: Extreme caution must be used when operating engine above the recommended .320" (8.128mm) BTDC. Advancing spark beyond recommended degrees will cause pre-ignition, and RPM will decrease noticeably after running for several minutes. Continued operation under this condition will result in scored pistons.